

**I/UCRC in Energy Efficient Systems Planning Grant Meeting
December 1-2, 2010
Binghamton University**

AGENDA

November 30:

Traditions at the Glen, Johnson City, NY

5:00-6:30 pm Networking Reception

December 1:

Old Union Hall, University Union

Participant Registration

7:30 - 8:15 am Continental Breakfast

Welcome remarks:

**8:15 - 8:35 am Peter Mileur, Vice President and Provost
Bahgat Sammakia, NSF I/UCRC in Energy Efficient Systems, Director, Binghamton U**

Vision and Capabilities of the Center

I/UCRC Site Directors

**8:35 - 9:15 am Bahgat Sammakia and Kanad Ghose, Binghamton University
Yogendra Joshi, Georgia Institute of Technology
Dereje Agonafer, University of Texas at Arlington
Andrew Alleyne, University of Illinois at Urbana Champaign
Alfonso Ortega, Villanova University**

NSF I/UCRC presentation

**9:15 - 10:00 am Rathindra DasGupta, NSF I/UCRC Program Director
Larry Hornak, NSF I/UCRC Program Director
Donald Price, I/UCRC External Evaluator**

10:00 - 10:15 am BREAK

Project Presentations

Exploiting Repetitive Workloads for Improving Server Energy –Efficiency
Kanad Ghose, Binghamton University

Optimized x86 Server CPU Architectures for Energy Efficiency
Kanad Ghose, Binghamton University

**10:15 – noon Scalable Control of Thermal System Networks for Data Centers
Andrew Alleyne, University of Illinois**

Dynamic Effects due to Air Flow and Power Variations in a Data Center
Bahgat Sammakia, Binghamton University

Energy Usage Minimization for Air Cooled Cabinets
Yogendra Joshi, Georgia Institute of Technology

noon - 1:00 pm

LUNCH

Project Presentations

Assessment of Air Side Economizers
Dereje Agonafer, University of Texas at Arlington

Compact Models for Real-Time Thermal Modeling of Data Centers
Yogendra Joshi, Georgia Institute of Technology

1:00 - 3:00 pm

Very High Power Air Cooling Solutions (Modeling and Measurements)
Dereje Agonafer, University of Texas at Arlington

Exergy Based Approaches for Holistic Design of Energy Efficient Data Centers
Alfonso Ortega and Kamran Fouladi, Villanova University

Some Approaches for Recovery of Waste Energy from Data Centers
Alfonso Ortega, Villanova University

3:00 - 3:15 pm

BREAK

3:15 - 4:15 pm

Industry Workshop
Babu DasGupta, Moderator

4:15- 4:30 pm

Review of evening and Day 2 activities
Bahgat Sammakia, I/UCRC Director

5:00 pm

Technical Forum and Social
Student Poster Session

**Anderson Reception
Room**

7:00 pm

Dinner

December 2

Old Union Hall

7:30 - 8:00 am

Continental Breakfast

8:00 - 9:30 am

Feedback from Industry Workshop
Roger Schmidt, IBM, Industry Moderator

9:30 - 11:00 am

LIFE FORM review and Discussion
Rathindra DasGupta

11:00 - 11:30 am

NSF Closed Session with Industry

11:30 - 12:00 pm

Summary & Closing Remarks
Bahgat Sammakia and Kanad Ghose
Rathindra DasGupta

ADJOURN